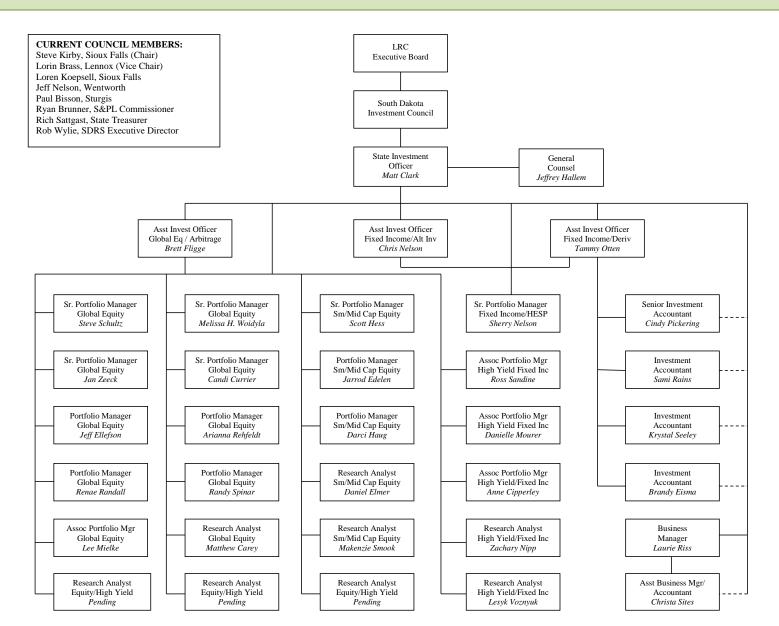
South Dakota Investment Council FY 2019 Appropriations Committee Budget Hearing Overview – January 12, 2018

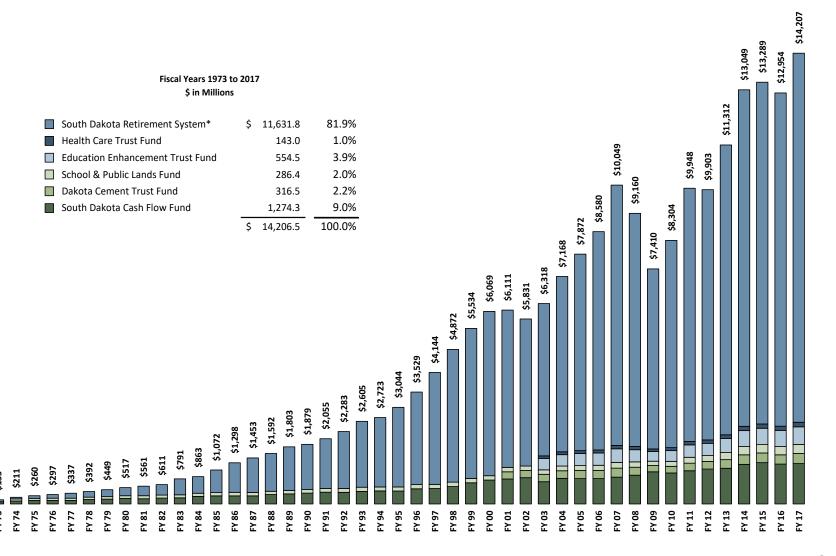
OVERVIEW

- Organization Chart
- Assets
- Investment Performance
- Cost Efficiency
- Long-Term Plan
- Compensation Overview
- FY 2017 Year-End Budget Review
- BUDGET BRIEFING (separate document)
 - Budget Funding Sources
 - FY 2019 Budget Request
 - Trust Fund Summary
 - Historical Unit Cost
 - Internal Management & Use of External Managers

Organization Chart



Assets



Investment Performance

Returns vs. Benchmarks

		FY 2017	4 Years Annualized FY 14 – 17	10 Years Annualized FY 08 – 17
•	SDRS Total Fund	13.81%	9.05%	6.47%
•	Capital Market Benchmark Added Value	10.96% 2.85 %	8.18% . 87%	5.31% 1.16%
•	State Fund Universe Added Value	12.38% 1.43 %	8.35% .70%	5.31% 1.16%
	Beginning FY 2017 SDRS Assets		\$10.502 billion	
	Ending FY 2017 SDRS Assets		\$11.632 billion	

Investment Performance

Earnings vs. Benchmarks

Total SDRS dollars earned Fiscal Year 2017 \$1.465 million

Total SDRS dollars earned last 4 years \$3.706 billion

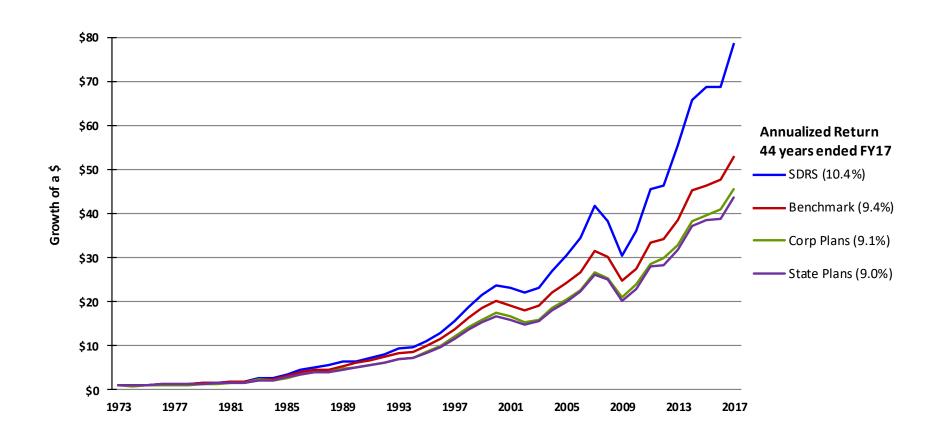
Total SDRS dollars earned last 10 years \$5.886 billion

Extra earnings resulting from last 1, 4 and 10 years of performance over benchmark (not including compounding):

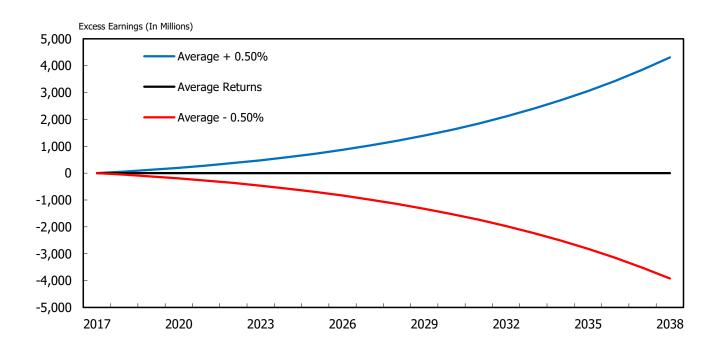
	<u>1 year</u>	4 years	10 years
o vs. Capital Markets Benchmark	\$299 million	\$370 million	\$1.033 billion
o vs. State Funds	\$151 million	\$321 million	\$1.090 billion

Superior returns add up over time

Cumulative returns for SDRS, Benchmark, Corporate plans, and other States



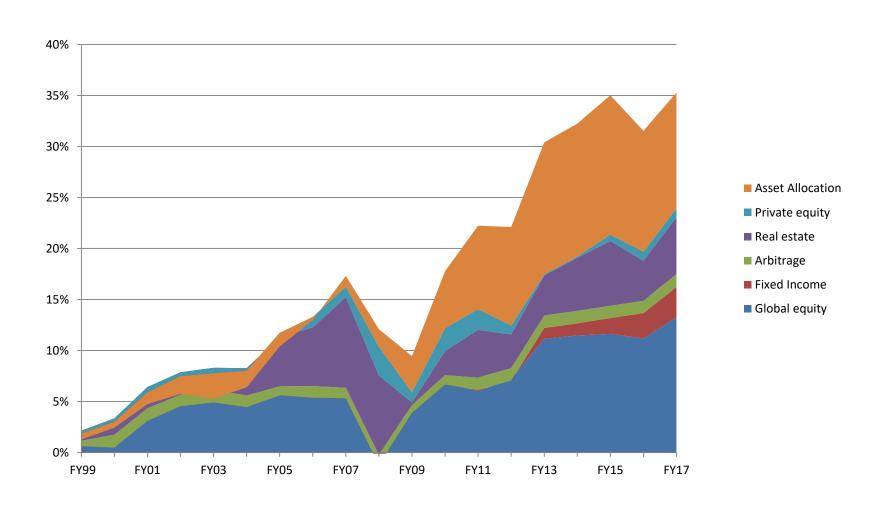
Potential Excess Earnings



- SDIC 44-year outperformance = .98% annualized vs. benchmark
- Outperformance of .5% next 20 years = extra \$4.3 billion
- Underperformance of .5% = cost to retirement system of \$3.9 billion.

Many pistons contribute

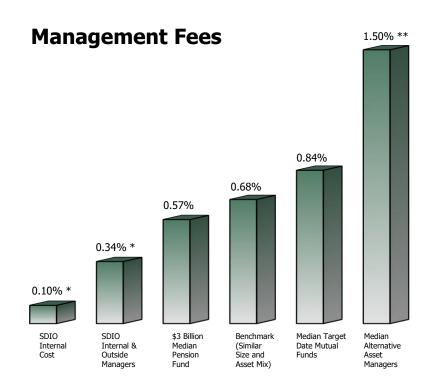
Cumulative added value by source FY99 to FY17



Every asset category has good and bad years Annual added or detracted value by source

Asset Class	- FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global equity	0.8%	-0.1%	2.9%	1.9%	0.0%	-0.4%	0.8%	-0.3%	-0.1%	-6.2%	5.6%	2.1%	-0.8%	1.1%	3.7%	0.3%	0.1%	-0.4%	1.8%
Fixed Income	-0.1%	-0.1%	-0.3%	-0.6%	0.3%	0.0%	0.3%	0.1%	0.0%	0.2%	-0.9%	0.6%	0.4%	-0.3%	1.2%	0.1%	0.4%	0.9%	0.5%
Arbitrage	0.5%	0.7%	0.0%	-0.1%	0.1%	-0.1%	-0.3%	0.3%	-0.1%	-0.2%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Real estate	1.0%	0.6%	0.5%	0.1%	0.0%	0.5%	2.1%	0.9%	3.0%	-1.0%	-7.0%	2.1%	2.3%	-1.3%	0.6%	1.2%	1.1%	-2.3%	1.6%
Private equity	-0.3%	0.0%	-0.2%	0.2%	-0.2%	0.3%	0.7%	0.6%	-0.1%	1.8%	-1.8%	1.2%	-0.2%	-1.1%	-0.8%	0.1%	0.5%	0.3%	0.0%
Asset Allocation	-0.6%	0.0%	-0.6%	-0.6%	-0.7%	0.8%	0.1%	0.8%	1.0%	1.0%	1.5%	1.4%	1.9%	1.5%	2.1%	-0.3%	0.0%	-1.1%	-1.1%
Total	1.3%	1.1%	2.3%	1.0%	-0.4%	1.1%	3.7%	2.4%	3.8%	-4.5%	-2.4%	7.6%	3.8%	-0.1%	6.8%	1.4%	2.1%	-2.6%	2.9%

Cost Efficiency



Difference between SDIC cost of .34% and benchmark cost of .68% is \$48 million per year

- * SDIC projected expenses for FY 2019 using adjusted assets and expected average performance incentives
- ** Plus 20% profit participation after preferred return

Long Term Plan Executive Summary Projected LTP & Unit Cost Summary

	FY 2019	FY 2024	FY 2029
INVESTMENT OFFICE BUDGET			
Personal Services			
Number of Employees	34.25	36.25	34.25
Base Compensation - Total Staff	5,513,081	7,210,245	8,858,233
Staff Attorney (1/4 FTE) & Interns	62,526	69,885	78,109
Investment Council	6,227	6,227	6,227
Flexibility funds-Retirements & Resignations	155,100	173,352	193,751
Investment Incentive Maximum	9,931,510	12,675,585	15,623,140
Benefits	2,436,794	3,085,571	3,759,866
Total Personal Services	18,105,236	23,220,865	28,519,327
Operating Expenses			
Contractual Services	1,860,368	2,012,565	2,221,791
Travel	85,000	95,003	106,182
Office Supplies & Postage	9,000	10,059	11,243
Capital Assets	40,520	52,118	58,867
Total Operating Expenses	1,994,888	2,169,745	2,398,083
Total Investment Council Budget	20,100,124	25,390,610	30,917,410
ASSET SUMMARY *			
Internal Assets	11,971,326,399	14,763,646,211	18,216,970,120
External Assets	3,475,546,374	4,286,219,868	5,288,797,777
Total Assets	15,446,872,773	19,049,866,079	23,505,767,897
EXPENSE SUMMARY			
Internal Expenses	20,100,124	25,390,610	30,917,410
External Manager Fees	38,231,010	47,148,419	58,176,776
Total Expenses	58,331,134	72,539,028	89,094,185
UNIT COST SUMMARY **			
ONLY COOL SUMMANY			
Internal Expenses as % of Total Assets	0.093%	0.095%	0.093%
Total Expenses as % of Total Assets	0.341%	0.342%	0.341%

^{*} Projections based on long-term assumed returns applied to 6/30/17 assets. Updated each June 30.

^{**}Unit Cost Summary uses assumed average investment performance incentives

Compensation Overview

- Long term results have significantly exceeded benchmarks
 - Added 35% beyond benchmark to SDRS assets in the past 19 years
- Continued success dependent on high caliber team
 - Internally manage most assets using internally generated research
- Future team depends on retention of talent pipeline and trainers
 - Develop internally as cannot compete for top tier experienced talent
- Compensation plan aligned with goal of adding value over long term
 - Motivate superior long-term performance and retain successful staff
- Compensation plan updated in 2013
 - Council target is 70% of cost of living adjusted median industry pay to balance getting a good deal for South Dakota without losing the good deal if we cannot keep our people
 - Incorporates performance incentives
 - 2013 study showed compensation had fallen to 55%.

Compensation Overview, continued

- Council changes implemented in 2014 to get back to target
 - Expanded incentive compensation plan as opposed to adjusting base compensation
 - Incentives expanded to include longer term and stretch incentives and expected to average 80% (0% to 200%)
 - Incentives aligned with the goal of adding value and only paid if add value
- Compensation study updated in 2016
 - Indicated only modest slippage from target
- Cost efficient due to internal management capabilities
 - Securing team to preserve internal capabilities best chance to remain cost efficient
 - Internal cost .1% with expected average incentives

FY 2017 Budget and Actual

	Actual Exp FY 2017	Received FY 2017	<u>Unexpended</u>
PERSONAL SERVICES			
TOTAL FTEs	31.25	32.25	
BASE COMPENSATION			
Base Compensation - Investment Staff	4,436,096	4,730,664	294,568 *
Base Comp - Accounting, Admin & Longevity	395,671	420,330	24,659
TOTAL STAFF - FULL TIME	4,831,767	5,150,994	319,226
P/T Staff Attorney & Interns	46,337	62,527	16,190
Investment Council	3,225	6,227	3,002
Retirement & resignation flexibility funds	0	155,100	155,100
Benefits	915,532	996,475	80,943
Total Base Compensation	5,796,861	6,371,323	574,461
Investment Performance Incentives			
Maximum Potential Investment Perf Incentive	3,917,062	8,921,550	5,004,488
Benefits	480,197	1,231,174	750,977
Total Investment Performance Incentives	4,397,259	10,152,724	5,755,465
Total Personal Services	10,194,120	16,524,047	6,329,926
OPERATING EXPENSES			
Contractual Total	1,560,584	1,662,132	101,548
Travel	66,817	85,000	18,183
Office Supplies & Postage	5,953	12,733	6,780
Capital Assets	37,885	44,400	6,515
Total Operating Expenses	1,671,240	1,804,265	133,025
TOTAL BUDGET	11,865,360	18,328,312	6,462,952

^{*} Includes \$54,443 Allianz reimbursement & unused compensation